# Nonhemorrhagic complications in dengue fever with thrombocytopenia

Dear Editor,

We read with great interest the original article by Jayanthi and Tulasi<sup>[1]</sup> in the recent issue of your journal. At first, we would like to commend the authors for their endeavor but at the same time have the following comments to offer, explanation to which is expected to benefit the general readers of the journal:

- The authors mention three objectives of the study, but they
  do not provide how the sample size of 99 was calculated; this
  is of special importance as the power and precision would
  be greatly affected by the sample size<sup>[2]</sup>
- Mention is made regarding consent from the patients but it is not stated whether ethical clearance was obtained from the Institutional/university Ethics Committee
- Material and methods state that "Data are collected using interview, physical examination, radiological examination, sputum examination, and laboratory data." It is not clear why 'sputum examination' was done in these patients and also no such data are presented
- 4. The authors do not mention how the following terminologies were diagnosed/defined in the present study: (a) dengue infection, (b) thrombocytopenia, (c) leukopenia, (d) hepatitis, (e) transaminitis, (f) acute kidney injury, (g) acute respiratory distress syndrome, (h) meningoencephalitis, and (i) nonhemorrhagic complications. Being either the risk factors or the outcome measures, the importance of above-mentioned parameters needs cannot be overemphasized. The special interest would be to know whether the platelet count and total leukocyte count refers to the values at admission or the lowest values during the hospital stay or the average of the all the values obtained. Further elaboration is required regarding the protocol followed for following these patients during admission and thereafter both clinically and also with the help of laboratory and radiological investigations
- 5. No exclusion criteria have been mentioned in the study design. This makes one suspect that whether patients with preexisting diseases which may adversely affect their blood parameters (e.g. chronic immune thrombocytopenic purpura, chronic leukemia) might have also been included. Again, the presence of comorbidities, such as chronic renal or liver disease, if present in the study participants, is also expected to increase their length of hospital stay
- 6. There is also no mention regarding the discharge criteria used as it is expected to influence the duration of hospital stay and would certainly be required while comparisons are made with similar studies<sup>[3]</sup>

7. The results mention meningoencephalitis as one of the complications but in the discussion, it is mentioned that "Patients with lower platelet count was found to have.... ARDS and encephalopathy." Hence, it makes the readers wonder whether all encephalopathy or only cases of dengue meningoencephalitis were assessed.

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### **Conflicts of interest**

There are no conflicts of interest.

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### References

- Jayanthi HK, Tulasi SK. Correlation study between platelet count, leukocyte count, nonhemorrhagic complications, and duration of hospital stay in dengue fever with thrombocytopenia. J Family Med Prim Care 2016;5:120-3.
- 2. Arya R, Antonisamy B, Kumar S. Sample size estimation in prevalence studies. Indian J Pediatr 2012;79:1482-8.
- 3. Ibrahim S, Horadagoda C, Maithripala C, Lokunarangoda N, Ranasinghe G, Wickramarathne T, *et al.* Characteristics and management patterns of patients admitted with fever and thrombocytopenia to an acute general medical unit in Sri Lanka. J Glob Infect Dis 2011;3:203-5.

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